

# WEST Search History

DATE: Thursday, November 06, 2003

## Set Name Query

side by side

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result set

*DB=USPT,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR*

L30	l10 and l21	1	L30
L29	l9 and l21	13	L29
L28	l6 and l21	8	L28
L27	l3 and l21	10	L27
L26	l21 and l24	8	L26
L25	L24.ab.	11	L25
L24	l23 near5 function\$7	54	L24
L23	l1 near5 (expansion or expand\$4 or add\$4)	569	L23
L22	l14 and L21	13	L22
L21	l12 or l13 or l15 or l16 or l17 or l18 or l19 or L20	2161	L21
L20	((((455/575.1)!.CCLS.) )	244	L20
L19	((((455/572)!.CCLS.) )	270	L19
L18	((((455/556.2)!.CCLS.) )	63	L18
L17	((((361/737)!.CCLS.) )	568	L17
L16	((((439/946)!.CCLS.) )	170	L16
L15	((((710/2)!.CCLS.) )	259	L15
L14	L1.ti.	3979	L14
L13	((((710/72)!.CCLS.) )	307	L13
L12	((710/62)!.CCLS. )	529	L12
L11	L10 same (housing or cradle or dock\$4)	2	L11
L10	l1 same (control\$4 near3 peripheral)	34	L10
L9	L8 same control\$4	181	L9
L8	l1 same peripheral	554	L8
L7	L6 same socket	7	L7
L6	L5 same port	47	L6
L5	l1 same housing	541	L5
L4	L3 same socket	4	L4
L3	l1 same cradle	155	L3
L2	L1.ab.	14233	L2
L1	(pda or (personal adj digital adj assistant))	23783	L1

END OF SEARCH HISTORY

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L2: Entry 37 of 14233

File: USPT

Jul 29, 2003

US-PAT-NO: 6600657

DOCUMENT-IDENTIFIER: US 6600657 B1

TITLE: Accessory adapted for digital personal assistant

DATE-ISSUED: July 29, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yerazunis; William S.	Acton	MA		
Bajracharya; Max P.	Cambridge	MA		
Carlson; Andrew H.	Seattle	WA		
Migdal; Joshua N.	Brockton	MA		
Wickman; Curtis A.	Toronto			CA

US-CL-CURRENT: 361/737; 361/740

## ABSTRACT:

An accessory is adapted to operate with a personal digital assistant. The accessory includes a housing physically enclosing an electrical interface externally accessible by the personal digital assistant, and a pair of opposing members arranged on the housing to rigidly mount the personal digital assistant in a fixed relationship with the accessory. The opposing members are spring loaded by a spine portion of the housing.

5 Claims, 11 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 9

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L2: Entry 38 of 14233

File: USPT

Jul 29, 2003

US-PAT-NO: 6599147

DOCUMENT-IDENTIFIER: US 6599147 B1

TITLE: High-density removable expansion module having I/O and second-level-removable expansion memory

DATE-ISSUED: July 29, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mills; Kevin J.	Palo Alto	CA		
Gifford; Michael L.	San Leandro	CA		

US-CL-CURRENT: 439/377; 439/76.1, 439/946

## ABSTRACT:

The utility of portable computer hosts, such as PDAs (or handhelds), is enhanced by methods and apparatus for removable expansion cards having application specific circuitry, a second-level-removable memory, and optional I/O, in a number of illustrative embodiments. In addition to providing greater expansion utility in a compact and low profile industrial design, the present invention permits memory configuration versatility for application specific expansion cards, permitting easy user field selection and upgrades of the memory used in conjunction with the expansion card. Finally, from a system perspective, the present invention enables increased parallelism and functionality previously not available to portable computer devices.

36 Claims, 42 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 37

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L11: Entry 1 of 2

File: USPT

Nov 30, 1999

DOCUMENT-IDENTIFIER: US 5996074 A

**\*\* See image for Certificate of Correction \*\***

TITLE: In-box configuration apparatus for a computer system

Detailed Description Text (4):

Now referring to FIG. 2 a computer system 200 mounted in computer housing 110 (see FIG. 1) includes a central microprocessor (CPU) 210 and is connected to a power bus 220, an address bus 230, a control bus 240, and a data bus 250 as is well known. A power supply 260 includes power switch 170 and is connected to connector 120. The power supply 260 has its output applied to a voltage regulator 270 which energizes the power bus 220. The power supply normally includes the cooling fan 190 but a separate fan or plural fans may be utilized. A system memory 280 is attached to busses 220, 230, 240 and 250 as are a peripheral bus controller 290, an input device controller 300 and writable storage media which may include CMOS storage 310, flash memory 320 and one or more hard disk drives 330. The system memory 280, as is well known, provides instructions to the CPU 210 for execution of various calculation and control functions. The keyboard connector 150 and mouse port controller 160 are connected to the input device controller 300. While a computer system has been described other electronic devices such as PDAs and televisions that require customization data may benefit from in-the-box customization of the invention.

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L7: Entry 1 of 7

File: USPT

Jul 29, 2003

DOCUMENT-IDENTIFIER: US 6599152 B1

TITLE: Contact pin design for a modular jack

Detailed Description Text (4):

As seen in FIGS. 8 and 9, a communications device in accordance with a preferred embodiment of the present invention includes a communications card 200 that is configured to be inserted into a corresponding socket of a host device such as a computer (not shown). The computer can be any type of a wide variety of computers includes personal, portable, laptop, notebook, palm, personal data assistants (PDAs), etc. The communications card 200 includes a housing 202 with a generally rectangular shaped configuration having a top surface 204, bottom surface 206, right side 208, left side 210, front end 212 and rear end 214. The communications card 200 conforms to the Type III PCMCIA standards with a length of 85.6 mm (3.4 inches), a width of 54.0 mm (2.1 inches), and a height of 10.5 mm (0.4 inches), but it will be appreciated that the card may have other desired sizes and configurations that are suitable for its intended purpose, and the card does not have to conform to any specific standards or guidelines. A 68-pin connector 216 located at the front end 212 of the card 200 allows the card to communicate with the computer, but other suitable connectors such as serial, parallel, SCSI or other ports may also be used. A printed circuit board (PCB) or substrate 218 is located within the housing 202 and it includes logic circuitry and various components 219 necessary to perform the desired functions of the communications card 200.

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L7: Entry 6 of 7

File: USPT

Dec 4, 2001

DOCUMENT-IDENTIFIER: US 6325674 B1

TITLE: Card edge connector for a modular jack

Detailed Description Text (4):

As seen in FIGS. 8 and 9, a communications device in accordance with a preferred embodiment of the present invention includes a communications card 200 that is configured to be inserted into a corresponding socket of a host device such as a computer (not shown). The computer can be any type of a wide variety of computers including personal, portable, laptop, notebook, palm, personal data assistants (PDAs), etc. The communications card 200 includes a housing 202 with a generally rectangular shaped configuration having a top surface 204, bottom surface 206, right side 208, left side 210, front end 212 and rear end 214. The communications card 200 conforms to the Type III PCMCIA standards with a length of 85.6 mm (3.4 inches), a width of 54.0 mm (2.1 inches), and a height of 10.5 mm (0.4 inches), but it will be appreciated that the card may have other desired sizes and configurations that are suitable for its intended purpose, and the card does not have to conform to any specific standards or guidelines. A 68-pin connector 216 located at the front end 212 of the card 200 allows the card to communicate with the computer, but other suitable connectors such as serial, parallel, SCSI or other ports may also be used. A printed circuit board (PCB) or substrate 218 is located within the housing 202 and it includes logic circuitry and various components 219 necessary to perform the desired functions of the communications card 200.

**WEST****End of Result Set**

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L7: Entry 7 of 7

File: USPT

Aug 14, 2001

DOCUMENT-IDENTIFIER: US 6274266 B1

TITLE: Battery chamber contacts for handheld electronic devices

Detailed Description Text (2):

Referring to FIGS. 2, 3 and 4, the handheld electronic device 20 (taking a PDA for example) according to this invention includes a device body and a battery packet 26. The device body includes an upper casing 21, a lower casing 22 engageable with the upper casing 21 to form a space thereinbetween for housing a sensor board (or display screen) 23, a stylus 24, a plurality of buttons 25, a control unit (not shown in the figures) and a battery chamber 221. The upper casing 21 has a plurality of openings (unmarked) to enable the buttons 25 and the sensor board 23 to expose outside for user access. The lower casing 22 includes the battery chamber 221 which has an end opening 2211 (shown in FIG. 5) for receiving the battery packet 26 and a stylus trough 222 to house the stylus 24. The stylus 24 may write or input data on the sensor board 23 which transmits signals to the control unit for processing. Referring to FIG. 5, the device body may further has a signal port 224 engageable with a signal cable (not shown in the figure) for transmitting signals to a computer or other devices and a power port 225 for coupling with a DC transformer (not shown in the figure) which in turn connects with an external power supply such as a power socket.

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L4: Entry 3 of 4

File: USPT

Nov 24, 1998

DOCUMENT-IDENTIFIER: US 5841424 A

TITLE: USB to multiple connect and support bays for peripheral devices

Detailed Description Text (9):

Since peripherals typically vary in shape and function, adapter 35 that interfaces with a specific peripheral is provided to act as a socket for that specific peripheral, allowing the peripheral to seat and connect to PPM 31. The lower shape of adapters is common, and the upper cradle slot and connector is provided for a specific peripheral. For example, adapter 35 in FIG. 3 is designed with a cradle slot 33 to provide a fit to a rectangularly shaped peripheral, such as a Personal Digital Assistant (PDA) 37 as described briefly in the background section.



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L4: Entry 2 of 4

File: USPT

Jan 30, 2001

DOCUMENT-IDENTIFIER: US 6182169 B1

TITLE: Tether fastened to personal digital assistant by latch having spring biased manual toggle

Brief Summary Text (6):

One of the unique attributes of the 3Com Corporation line of Palm Computing.RTM. Connected Organizers and the Workpad PC IBM.RTM. is that the base of the PDA case is configured to "plug-in" or dock in female sockets of mounting cradles and circuitry modules each of which may contain external electronic processing elements. Typically, mounting cradles include a pedestal base which support the PDA in an inclined position on a horizontal support surface while simultaneously electrically coupling the PDA to external electronics, e.g., a battery charger and/or external computer system. The back face of the docking base of Palm Computing.RTM. Connected Organizers and clones feature a plurality (10) centrally positioned adjacent conductive strips positioned between a pair of raised lands aligned parallel the side edges of the casing for allowing "wiping" electrical contact between the PDA and the female/cradle electronics elements. Latch notches (recesses) are located proximate end of the docking base of the PDA casing which penetrate into its side edges for receiving complementary shaped male latching nibs of the enveloping female module/cradle socket.

Detailed Description Text (2):

Looking at FIG. 1, an early Palm Computing.RTM. Connected Organizer, known as the PalmPilot.RTM. 11 includes a clam shell type casing defining a molded circumferential curvilinear shoulder seating surface 13 co-dimensional with the PDA case 14 integral with and surrounding a dimensionally smaller convex hexahedral male "plug-in" or docking base 16 having convex side faces 15 and latch notches 17 recessed into opposite side edges 18. [See U.S. Pat. No. Des. 397,679] The Palm III Connected Organizer model is thinner than its predecessor, and has a clam shell type casing which tapers smoothly to the docking end dimensions eliminating the molded curvilinear shoulder seating surface. Both the early and newer models of the Palm Computing.RTM. Connected Organizer present raised lands or shoulders 19 defining a connection slot 20 on either side of a plurality of parallel conductive connection strips (not shown) on the back face of the docking base 16 which function to aligned and properly orient the PDA connection strips with wiping type electrical connectors of a receiving socket plug of a circuitry module or cradle (not shown). In particular, the lands 19 prevent wrong way insertion of the PDA into a receiving socket.

## CLAIMS:

1. A tether and latch for a shirt pocket (palm) sized note taking and record keeping Personal Digital Assistant computer (PDA) having a docking base with latching notches recessed into opposite side edges and configured for seating within female sockets of external mounting cradles and circuitry modules, comprising in combination:

a) a latch body providing,

(i) a socket for snugly receiving curvilinear docking surfaces of the docking base of the PDA having a mating curvilinear circumferential lip with a fitting gap and a fixed catch nib projecting inwardly at a location within the socket opposite the gap located for seating into a latching notch in a side edge of the docking base,

(ii) a yoke above the fitting gap in the circumferential lip; and

(iii) a tab having a tether hole;

b) a compression spring; and

- c) a manual toggle mechanically coupled to and translating on the yoke linearly inward and outward relative to the socket providing,
  - (i) an exterior tongue extending downward closing the gap in the circumferential lip of the latch body having a catch nib projecting inwardly located for seating into the latching notch in the opposite side edge of the docking base when the PDA is docked in the socket provided by the latch body, and
- d) cooperating mechanical means integral with the yoke and integral with the manual toggle for,
  - (i) confining and compressing the spring between the yoke and toggle biasing the toggle to translate inward on the yoke relative to the socket, and
  - (ii) resisting outward translation of the toggle on yoke relative to the socket, whereby, the toggle translates outward responsive to manual force pushing the toggle outward compressing the spring further and translates inward responsive to expansion force exerted by the compressed spring, and
- e) a tether fastened to the tether hole adapted to be fastened to a person using the PDA.

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L2: Entry 11 of 14233

File: USPT

Sep 30, 2003

US-PAT-NO: 6628473

DOCUMENT-IDENTIFIER: US 6628473 B1

TITLE: Mobile device having disk drive including a data storage zone with a data track pitch configured for use in a mobile environment

DATE-ISSUED: September 30, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Codilian; Raffi	Irvine	CA		
Hanan; Thomas D.	Mission Viejo	CA		
Sareen; Anil	Mission Viejo	CA		

US-CL-CURRENT: 360/97.01

## ABSTRACT:

The invention may be embodied in a disk drive for use in a mobile device. The mobile device may be a hand held computing device such as a personal digital assistant (PDA) or a mobile terminal such as a cellular telephone. The mobile device includes a host processor for accessing data on the disk drive. The disk drive has a rotating disk media surface and a moveable read/write head disposed over the media surface. The disk drive includes a first data storage zone on the disk media surface for storing data on first data tracks using a first track pitch, and a second data storage zone on the common disk media surface for storing data on second data tracks using a second data track pitch. The first data track pitch is substantially wider than the second data track pitch.

14 Claims, 4 Drawing figures

Exemplary Claim Number: 8

Number of Drawing Sheets: 3

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L4: Entry 1 of 4

File: USPT

Apr 15, 2003

DOCUMENT-IDENTIFIER: US 6548967 B1

TITLE: Universal lighting network methods and systems

Detailed Description Text (81):

FIG. 8 shows several embodiments of modular lighting subsystems according to the principles of the invention. In a modular lighting subsystem 800, each module 810 may provide additional functionality such as sensing and communication. In FIG. 8, the modules 810 may connect to a base 820 with a simple mechanical and/or electrical connection. Suitable mechanisms for forming connections are known in the art, such as cellular phone and personal digital assistant power and data connections, light bulb connections, dual in-line pin package sockets, zero insertion-force sockets, cradles, modular jacks for phone and network connections, electrical sockets, game cartridge slots for gaming platforms, docking stations for computers, and so forth. An additional locking feature such as a mechanical level or bayonet mounting may be used to insure that all modules 810 remain in place as others are removed and inserted.

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L28: Entry 2 of 8

File: USPT

Aug 13, 2002

DOCUMENT-IDENTIFIER: US 6434403 B1

TITLE: Personal digital assistant with wireless telephone

Detailed Description Text (4):

PDA telephone 100 also includes an antenna 110, side-action buttons 115, hinges 120, multi-use port 125, buttons 130, speaker 135 and microphone 140. Antenna 110 functions as a conductive radiation element for PDA telephone 100 that radiates and/or receives electromagnetic waves. Side-action buttons 115 allow single handed operation of PDA telephone 100 with a user's thumb and fingers. Side-action buttons 115 may be arranged on housing 102 in convenient positions so as to provide left or right-handed user access to PDA telephone 100. In addition, side-action buttons 115 may be used to execute other functions of PDA telephone, such as the muting of telephone calls, the accessing of menu items, etc.

Current US Original Classification (1):455/556.2

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L28: Entry 3 of 8

File: USPT

Jul 23, 2002

DOCUMENT-IDENTIFIER: US 6424369 B1

TITLE: Hand-held computers incorporating reduced area imaging devices

Detailed Description Text (12):

As shown in FIG. 4, a conventional lithium ion battery 62 is provided which communicates with power supply board 64. Power supply board 64 conditions various power outputs to the components of the device, to include power to the video components. In the preferred imaging device of this invention, the power to the imaging device may simply be direct current of between about 1.5 to 12 volts, depending upon the power requirements of the imaging device. A camera on/off switch 66 must be set to the "on" position in order to activate the camera module 10. The video processor board 50 then transfers power to supplies the camera module 10, and also receives the analog pre-video signal back from the camera module, as further discussed below. After processing of the pre-video signal at the video processor board 50, the video signal is video ready, meaning that it may then be directly viewed on a remote compatible video device 60, such as a television or computer monitor. A video port 54 can be provided on the housing 24 enabling a user to take a standard video jack (not shown) and interconnect the PDA with the video port of the remote video device. The video format for such remote video devices includes NTSC/PAL and VGA; thus, the video signal processed by video processor board 50 creates the video ready signals for use with these remote video devices. For purposes of viewing images on the monitor 26, the pre-video signal is further processed into a digital format within video processor board 50, preferably an 8 bit component video signal format that is commonly referred to as "YUV 4:2:2." This video format easily lends itself to video compression. This 8 bit digital video signal is then sent to the digital signal processor 72 which performs two functions relevant to the video signal. The digital signal processor 72 further converts the signal into a format that is compatible with the driver circuitry of the video monitor 26. Secondly, the digital signal processor 72 compresses the YV signal using a common video compression format, preferably JPEG. The JPEG encoded video signal is then mixed with the audio signal created by microphone 78 and amplifier 74, and the resulting high frequency carrier signal may then be passed onto the transceiver/amplifier section 70 for transmission. It is to be understood that the transceiver/amplifier 70 is intended for communication with well-known wide area wireless communication networks. It is also contemplated within the spirit and scope of this invention that the PDA 22 be capable of communication with computer networks to include the worldwide web. Accordingly, the invention is well adapted for conducting video teleconferencing which is normally conducted with desktop computers and supplemental video equipment. The transceiver/amplifier section also modulates the carrier signal prior to transmission. Depending upon the position of video switch 37, the video signal from digital signal processor 72 is either sent to the monitor 26, or is sent to the transceiver/amplifier section 70 for transmission. As also shown, the antenna 36 is used for enhancement of reception and transmission of transmitted and received carrier signals.

Current US Cross Reference Classification (3):455/556.2

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L28: Entry 7 of 8

File: USPT

Feb 22, 2000

DOCUMENT-IDENTIFIER: US 6029213 A

TITLE: Automatic IR port detection and switching

Detailed Description Text (4):

In another example, notebook computer 126, FIG. 2b, is contained in a housing 128 and includes a first IR data port 130 mounted on a rear surface 132 of housing 128, and also includes a second IR data port 134 mounted on a side surface 136 of housing 128. Notebook computer 126 is mounted adjacent a PDA device 138 (discussed above) which includes a housing 140 and an IR port 142 mounted on a rear surface 144 of housing 140. Rear surface 144 of PDA device 138 is in close proximity to side surface 136 of notebook computer 126 to permit IR signal communication between IR port 134 of notebook computer 126 and IR port 142 of PDA device 138.

Current US Original Classification (1):710/72Current US Cross Reference Classification (6):710/62

**WEST**

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L26: Entry 1 of 8

File: USPT

Jun 11, 2002

DOCUMENT-IDENTIFIER: US 6402529 B2

TITLE: Card connector

Brief Summary Text (6):

In electronic devices such as cellular phones, telephones, PDAs and digital cameras, a variety of functions are added by inserting an IC card with a built-in CPU or memory IC, such as a SIM (subscriber identity module) card, an MMC (multimedia card) and an SD (secure digital; super density) card.

Current US Cross Reference Classification (1):361/737



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L26: Entry 5 of 8

File: USPT

Sep 12, 2000

DOCUMENT-IDENTIFIER: US 6119179 A

TITLE: Telecommunications adapter providing non-repudiable communications log and supplemental power for a portable programmable device

Brief Summary Text (7):

All mobile computers are designed to be as lightweight as possible. This is particularly problematic for power supply design, and output devices, generally, require substantial power supply capacity. Having very little power to spare, these mobile computers have spawned a flood of peripheral and accessory devices that offer various functions expanding the built-in input and output (I/O) capabilities of mobile computers as local area network (LAN) and wide-area network (WAN) telecommunications terminals, as well as, printer terminals. For example, U.S. Pat. Nos. 5,606,594 and 5,625,673 disclose communications accessories that provide an enclosure for and add functions to a PDA unit. However "accessories", unlike peripheral devices, do not have the computing power to provide an application program interface (API) for the mobile host computer.

Current US Original Classification (1):710/72Current US Cross Reference Classification (6):455/556.2Current US Cross Reference Classification (8):455/572

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L27: Entry 6 of 10

File: USPT

Feb 20, 2001

DOCUMENT-IDENTIFIER: US 6191743 B1

TITLE: Multiple antenna ports for electronic devices

Brief Summary Text (8):

The merger of wireless technologies such as cellular and paging systems with a visual interactive display system of a portable nature, such as a PDA, is becoming increasingly more accepted and prevalent in the market place. It is known, that a PDA may interface with a cradle or other receiving device having wireless receiving and/or transmitting capability. Such combination devices traditionally provide a holster or cradle receiving device into which the PDA is placed and also through which the PDA interacts to exchange baseband data. The holster or cradle device thereafter modulates or demodulates the baseband signal as received from the PDA into a suitable spectrum for interacting with a wireless hosting system. It is also well know that an integrated version of the above combination is also available wherein the receiving or transmitting capability is integrated within the PDA to provide a simplified functioning platform. One such device presently available is the PalmPilot VII as manufactured and sold by 3COM Corporation. Other such devices are also known and sold by other manufactures.

Current US Cross Reference Classification (1):455/556.2